UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

52044

7590

11/12/2010

SNELL & WILMER L.L.P. (Panasonic) 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626 EXAMINER

SASINOWSKI, ANDREW

ART UNIT PAPER NUMBER

2627

DATE MAILED: 11/12/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595.626	05/01/2006	Tadashi Nakamura	49288,2400	3748

TITLE OF INVENTION: DRIVE DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/14/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS; This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

appropriate. All further indicated unless correct maintenance fee notifications.	correspondence including ed below or directed other tions.	ng the Patent, advance of nerwise in Block 1, by (a	rders and notification of ration of ration of rational specifying a new corres	pondence address;	II be mailed to the current and/or (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use B	ock 1 for any change of address)	Feet	c) Transmittal This	nailing can only be used for certificate cannot be used for paper, such as an assignmen of mailing or transmission.	for any other accompanying	
52044	7590 11/12	/2010	III. (		ificate of Mailing or Trans		
600 ANTON BO SUITE 1400		nasonic)	I he Stat addi tran:	reby certify that this	s Fee(s) Transmittal is being ith sufficient postage for fir Stop ISSUE FEE address O (571) 273-2885, on the d	g deposited with the United	
COSTA MESA, CA 92626				(Depositor's name)			
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/595,626	05/01/2006	•	Tadashi Nakamura		49288.2400	3748	
TITLE OF INVENTION	N: DRIVE DEVICE						
C . DOT 11 STATE	I are the same of	T	Interviolation and	DDDV DAD GGT		D. CELDIE	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE			
nonprovisional	NO	\$1510	\$300	\$0 1	\$1810	02/14/2011	
EXAM	MINER	ART UNIT	CLASS-SUBCLASS				
	KI, ANDREW	2627	369-030230				
1. Change of correspond CFR 1.363).		•	2. For printing on the p				
Change of corresp	oondence address (or Cha B/122) attached.	inge of Correspondence	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to				
☐ "Fee Address" ind	lication (or "Fee Address	" Indication form					
PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.  2 registered patent attorneys or agents. If no name is listed, no name will be printed.							
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or typ	pe)			
PLEASE NOTE: Un recordation as set for	less an assignee is ident th in 37 CFR 3.11. Com	ified below, no assignee oletion of this form is NO	data will appear on the part of the part o	atent. If an assigne assignment.	e is identified below, the d	ocument has been filed for	
(A) NAME OF ASSI	•		(B) RESIDENCE: (CITY		OUNTRY)		
Diagonal and the comment				I. dinidud	poration or other private gro		
Please check the appropr	riate assignee category or	categories (will not be pi	rinted on the patent):	Individual 🖵 Coi	poration or other private gro	oup entity Government	
4a. The following fee(s)	are submitted:	41	<ul> <li>b. Payment of Fee(s): (Plean</li> <li>A check is enclosed.</li> </ul>	se first reapply an	y previously paid issue fee	shown above)	
☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			Payment by credit card. Form PTO-2038 is attached.				
			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	itus (from status indicate	d above)	очеграушент, то Беро	sit Account Ivamoci	(chelose a	ii extra copy of this form).	
	ns SMALL ENTITY state	· ·	b. Applicant is no long	ger claiming SMAL	L ENTITY status. See 37 C	FR 1.27(g)(2).	
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte ites Patent and Trademark	d from anyone other than to Office.	he applicant; a regis	tered attorney or agent; or th	ne assignee or other party in	
Authorized Signature				Date			
Typed or printed name				Registration No	0		
an application. Confident submitting the complete this form and/or suggest	itiality is governed by 35 d application form to the ions for reducing this bu	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	1.14. This collection is est depending upon the indivite Chief Information Office	imated to take 12 m idual case. Any cor cr. U.S. Patent and 1	e public which is to file (and inutes to complete, includir nments on the amount of tig Trademark Office, U.S. Dep SEND TO: Commissioner	ng gathering, preparing, and me you require to complete artment of Commerce, P.O.	
Alexandria, Virginia 223	313-1450.						

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/595,626	05/01/2006	Tadashi Nakamura	49288.2400 3748			
52044 7	52044 7590 11/12/2010			EXAMINER		
SNELL & WILM	MER L.L.P. (Panason	SASINOWSKI, ANDREW				
600 ANTON BOU	JLEVARD	ART UNIT	PAPER NUMBER			
SUITE 1400 COSTA MESA, C	'A 92626		2627 DATE MAILED: 11/12/201	0		

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 439 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 439 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)				
	10/595,626	   NAKAMURA, TADAS	SHI			
Notice of Allowability	Examiner	Art Unit				
	ANDREW J. SASINOWSKI	2627				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.						
1. This communication is responsive to 8/27/2010.						
2. ☑ The allowed claim(s) is/are <u>1-4</u> .						
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority unanal  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ul>	been received. been received in Application No		ion from the			
* Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.						
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.						
4. A SUBSTITUTE OATH OR DECLARATION must be subminification (PTO-152) which give			OTICE OF			
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	t be submitted.					
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached						
1)  hereto or 2)  to Paper No./Mail Date						
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date						
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).						
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.						
Attachment(s)	_					
1. Notice of References Cited (PTO-892)	5. Notice of Informal P					
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary Paper No./Mail Dat	ė				
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date</li> </ol>	7. 🔲 Examiner's Amendn	nenvComment				
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Stateme	ent of Reasons for Allow	wance			
	9.					
/ANDREW J SASINOWSKI/	/HOA T NGUYEN/		_			
Examiner, Art Unit 2627	Supervisory Patent Exa	aminer, Art Unit 2627	7			

#### **DETAILED ACTION**

### Allowable Subject Matter

Claims 1 – 4 are allowed.

The following is an examiner's statement of reasons for allowance: regarding claim 1, the prior art of record, considered alone or in combination, fails to teach the claim limitations "...storing the data to be recorded in the memory circuit; defining data from a start location of the data stored in the memory circuit to an end- point before a location corresponding to a next writable address as a first data portion; defining data from the location corresponding to the next writable address to an end location of the data stored in the memory circuit as a second data portion; and controlling the recording/reproduction section to record the second data portion temporally before recording the first data portion."

Regarding claim 2, the prior art of record, considered alone or in combination, fails to teach the claim limitations "...determining whether or not an ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster; determining whether or not a read-modify-write process is required; when it is determined that the ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster and the read-modify-write process is required, determining a specific location in the user data area where access time from the recording location of the replacement cluster is less than or equal to a predetermined time as a recording location at which the data is to be recorded; controlling the recording/reproduction section to record the data at the determined

Application/Control Number: 10/595,626

Art Unit: 2627

recording location." Claim 3 is also allowable at least due to its dependence upon claim 2.

Page 3

Regarding claim 4, the prior art of record, considered alone or in combination, fails to teach the claim limitations "...receiving a recording instruction specifying at least a location at which data is to be recorded; determining whether or not an ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster; determining whether or not a read-modify-write process is required; when it is determined that the ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster and the read-modify-write process is required, determining a specific location in the user data area where access time from the recording location of the replacement cluster is less than or equal to a predetermined time as a recording location at which the data is to be recorded; controlling the recording/reproduction section to record the data at the determined recording location."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Response to Arguments

Applicant's arguments with respect to the prior art rejections of claims 2 – 4 have been fully considered and are persuasive. The prior art rejections of claims 2 - 4 have been withdrawn.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW J. SASINOWSKI whose telephone number is (571)270-5883. The examiner can normally be reached on Monday to Friday, 7:30 to 5:00, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (571)272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/595,626 Page 5

Art Unit: 2627

/HOA T NGUYEN/ Supervisory Patent Examiner, Art Unit 2627

/ANDREW J SASINOWSKI/ Examiner, Art Unit 2627